

Title (en)
LOW DIMERIZING VIOLOGEN ELECTROCHROMIC COMPOUNDS AND DEVICES

Title (de)
NIEDRIG DIMERISIERENDE ELEKTROCHROME VIOLOGENVERBINDUNGEN UND VORRICHTUNGEN

Title (fr)
COMPOSÉS ET DISPOSITIFS ÉLECTROCHROMIQUES À FAIBLE DIMÉRISATION DE VIOLOGÈNE

Publication
EP 3953762 A4 20220504 (EN)

Application
EP 20786796 A 20200407

Priority
• US 201962831315 P 20190409
• IB 2020053325 W 20200407

Abstract (en)
[origin: US2020326602A1] wherein each R1 is individually an alkyl, a hydroxyalkyl, or an alkyl substituted with at least one polymerizable functional group; each R2 is a hydrogen; each R3 is individually a hydrogen or an alkyl; and each R4 is individually a hydrogen, an alkyl, or a hydroxyalkyl; and X⁻ is an anion.

IPC 8 full level
C09K 9/02 (2006.01); **C07D 401/02** (2006.01); **G02F 1/15** (2019.01); **G02F 1/1503** (2019.01)

CPC (source: EP US)
C07D 471/04 (2013.01 - US); **C07D 471/14** (2013.01 - US); **C07F 9/5765** (2013.01 - US); **C07F 9/6584** (2013.01 - US); **C09K 9/00** (2013.01 - US); **C09K 9/02** (2013.01 - EP US); **G02F 1/1503** (2018.12 - EP); **G02F 1/1516** (2018.12 - US); **C09K 2211/1044** (2013.01 - EP US); **C09K 2211/1055** (2013.01 - US); **G02F 1/1523** (2013.01 - US)

Citation (search report)
• [A] US 2008316574 A1 20081225 - BAUMANN KELVIN L [US], et al
• [A] US 2003234379 A1 20031225 - BURRELL ANTHONY K [US], et al
• [A] BAKUPOG THOMAS ET AL: "Viologen embedded polyaromatic hydrocarbons (VPAH2+): synthesis, computational, photophysical, and electrochemical characterizations of 3,8-diazaphenanthrenyl viologens", TETRAHEDRON LETTERS, vol. 56, no. 41, 21 August 2015 (2015-08-21), pages 5591 - 5594, XP029265975, ISSN: 0040-4039, DOI: 10.1016/J.TETLET.2015.08.049
• [A] LING YONGHUA ET AL: "A new cucurbit[8]uril-based fluorescent receptor for indole derivatives", CHEMICAL COMMUNICATIONS, no. 6, 1 January 2007 (2007-01-01), UK, pages 610 - 612, XP055901333, ISSN: 1359-7345, DOI: 10.1039/B611559D
• See references of WO 2020208529A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
US 11414594 B2 20220816; **US 2020326602 A1 20201015**; CN 113711121 A 20211126; CN 113711121 B 20240611; EP 3953762 A1 20220216; EP 3953762 A4 20220504; EP 3953762 B1 20220914; WO 2020208529 A1 20201015; WO 2020208529 A8 20210429

DOCDB simple family (application)
US 202016841966 A 20200407; CN 202080027425 A 20200407; EP 20786796 A 20200407; IB 2020053325 W 20200407